AUTHOR INDEX

Vol. XVI, Nos. 1-4, 1963

- Agmon, S., and Nirenberg, L.: Properties of solutions of ordinary differential equations in Banach space, 121
- Avila, Geraldo S. S., and Keller, Joseph B.: The high-frequency asymptotic field of a point source in an inhomogeneous medium, 363
- Blumenson, L. E.: On the eigenvalues of Hill's equation, 261
- Conley, Charles: On some new long periodic solutions of the plane restricted three body problem, 449
- Figueiredo, Djairo Guedes De: The coerciveness problem for forms over vector valued functions, 63
- Frederick, Karen N.: The Hopfian property for a class of fundamental groups. 1
- Hanisch, Herman, and Hirsch, Warren M.: On a functional equation arising in the theory of queues, 267
- ---: Properties of a transient queue,
- Hirsch, Warren M.: see Hanisch, Her-
- Jones, Jr., B. Frank: Various methods for finding unknown coefficients in parabolic differential equations, 33
- Kaniel, Shmuel, and Schechler, Martin: Spectral theory for Fredholm operators, 423
- Kaplan, Stanley: On the growth of solutions of quasi-linear parabolic equations, 305
- Karp, Samuel N.: see Morgan, Richard C.

- Keller, Joseph B.: see Avila, Geraldo S.
- --: see Levy, Dorothy M.
- Lax, Peter D.: An inequality for functions of exponential type, 241
- —, Morawetz, C. S., and Phillips, R. S.: Exponential decay of solutions of the wave equation in the exterior of a star-shaped obstacle, 477
- Levy, Dorothy M., and Keller, Joseph B.: Instability intervals of Hill's equation, 469
- Martens, Henrik H.: Torelli's theorem and a generalization for hyperelliptic surfaces, 97
- Morgan, Richard C., and Karp, Samuel N.: Uniqueness theorem for a surface wave problem in electromagnetic diffraction theory, 45
- Morawetz, C. S.: A uniqueness theorem for the relativistic wave equation, 353
- -: see Lax, P. D.
- Nirenberg, L., and Treves, F.: Solvability of a first order linear partial differential equation, 331
- -: see Agmon, S.
- Peters, A. S.: A note on the integral equation of the first kind with a Cauchy kernel, 57
- Phillips, R. S.: see Lax, P. D.
- Rejto, P. A.: On gentle perturbations, I, 279
- Rossi, Hugo: On envelops of holomorphy, 9

- Schechter, Martin: see Kaniel, Shmuel. Schwartz, J.: Two finite, non-hyperfinite, non-isomorphic factors, 19
- ---: Non-isomorphism of a pair of factors of type III, 111
- ---: Type II factors in a central decomposition, 247
- —: Compact analytical mappings of B-spaces and a theorem of Jane Cronin, 253
- Seidman, Thomas I.: correction, 95 Shields, Allen: On quotients of exponential polynomials, 27
- Stampacchia, Guido: On some regular multiple integral problems in the calculus of variations. 383
- —: Some limit cases of L^p-estimates for solutions of second order elliptic equations, 505
- Treves, F.: see Nirenberg, L.

Cumulative Author Index

VOLUMES I-XVI, 1948-1963

AGMON, SHMUEL, Multiple Layer Potentials and the Dirichlet Problem for Higher Order Elliptic Equations in the Plane I. Vol. X, No. 2, 1957, pp. 179-240.

—, On the Eigenfunctions and on the Eigenvalues of General Elliptic Boundary Value Problems, Vol. XV, No. 2, 1962, pp. 119-148.

—, DOUGLIS, A., and NIRENBERG, L., Estimates Near the Boundary for Solutions of Elliptic Partial Differential Equations Satisfying General Boundary Conditions I, Vol. XII, No. 4, 1959, pp. 623–727.

 NIRENBERG, L., and PROTTER, M. H., A Maximum Principle for a Class of Hyperbolic Equations and Applications to Equations of Mixed Elliptic-Hyperbolic Types, Vol. VI, No. 4, 1953, pp. 455–470.
 and NIRENBERG, L., Properties of Solutions of Ordinary Differential Equations in Banach Space, Vol.

XVI, No. 2, 1963, pp. 121-240.

AMERIO, LUIGI, Extension of the Notion of "Saddle Point" to Systems of Two Differential Equations in Three Variables, Vol. VI, No. 4, 1953, pp. 435-454.

ARSOVE, M. G., Some Criteria for Normality of Families of Continuous Functions, Vol. IX, No. 3, 1956, pp. 299-306.

ARTIN, EMIL, The Orders of the Linear Groups, Vol. VIII, No. 3, 1955, pp. 355-366.

-, The Orders of the Classical Simple Groups, Vol. VIII, No. 4, 1955, pp. 455-472.

ASGEIRSSON, LEIFUR, Some Hints on Huygens' Principle and Hadamard's Conjecture, Vol. IX, No. 3, 1956, pp. 307–326.

—, On Caschy's Problem for Linear Partial Differential Equations of Second Order in Four Variables, Vol. XIV, No. 3, 1961, pp. 171-186.

AVILA, G. S. S., and KELLER, J. B., The High-Frequency Asymptotic Field of a Point Source in an Inhomogeneous Medium, Vol. XVI, No. 4, 1963, pp. 363-381.

BARGMANN, VALENTIN, On a Hilbert Space of Analytic Functions and an Associated Integral Transform. Part I, Vol. XIV, No. 3, 1961, pp. 187-214.

BAZER, J., and HOCHSTADT, H., Diffraction of Scalar Waves by a Circular Aperture II, Vol. XV, No. 1, 1962, pp. 1-34.

Bennett, A. A., Some Numerical Computations in Ordnance Problems, Vol. VIII, No. 1, 1955, pp. 117-122.
Berg, P. W., The Existence of Subsonic Helmholtz Flows of a Compressible Fluid, Vol. XV, No. 3, 1962, pp. 289-348.

Bergman, Stefan, Multivalued Harmonic Functions in Three Variables, Vol. IX, No. 3, 1956, pp. 327-338.

Berkowitz, Jerome, On the Discreteness of Spectra of Singular Sturm-Liouville Problems, Vol. XII, No. 3, 1959, pp. 523-542.

—, and Gardner, C. S., On the Asymptotic Series Expansion of the Motion of a Charged Particle in Slowly Varying Fields, Vol. XII, No. 3, 1959, pp. 501-512.

BERLIN, T. H., see MONTROLL, E. W.

Bers, Lipman, Univalent Solution of Linear Elliptic Systems, Vol. VI, No. 4, 1953, pp. 513-526.

—, Results and Conjectures in the Mathematical Theory of Subsonic and Transonic Gas Flows, Vol. VII, No. 1, 1954, pp. 79-104.

---, Existence and Uniqueness of a Subsonic Flow Past a Given Profile, Vol. VII, No. 3, 1954, pp. 441-504.
--, Local Behavior of Solutions of General Linear Elliptic Equations, Vol. VIII, No. 4, 1955, pp. 473-496.

—, Survey of Local Properties of Solutions of Elliptic Partial Differential Equations, Vol. IX, No. 3, 1956, pp. 339-350.

-, Formal Powers and Power Series, Vol. IX, No. 4, 1956, pp. 693-712.

Bers, Lipman, Uniformization by Beltrami Equations, Vol. XIV, No. 3, 1961, pp. 215-228.

BIRKHOFF, GARRETT, Fourier Synthesis of Homogeneous Turbulence, Vol. VII, No. 1, 1954, pp. 19-44. BLANK, ALBERT, See KELLER, J. B.

Blumenson, L. E., On the Eigenvalues of Hill's Equation, Vol. XVI, No. 3, 1963, pp. 261-266.

BOTT, RAOUL, On the Iteration of Closed Geodesics and the Sturm Intersection Theory, Vol. IX, No. 2, 1956, pp. 171-206.

Bremmer, H., On the Diffraction Theory of Gaussian Optics, Vol. IV, No. 1, 1951, pp. 61-74.

—, The W.K.B. Approximation as the First Term of a Geometric-Optical Series, Vol. IV, No. 1, 1951, pp. 105-116.

—, The Jumps of Discontinuous Solutions of the Wove Equation, Vol. IV, No. 4, 1951, pp. 419–426.
BROMBERG, ELEAZER, Non-Linear Bending of a Circular Plate Under Normal Pressure, Vol. IX, No. 4, 1956, pp. 633–660.

BROWDER, F. E., On the Regularity Properties of Solutions of Elliptic Differential Equations, Vol. IX, No. 3, 1956, pp. 351-362.

BUCHAL, R. N., and KELLER, J. B., Boundary Layer Problems for Diffraction Theory, Vol. XIII, No. 1, 1960, pp. 85-114.

Bureau, F. J., Divergent Integrals and Partial Differential Equations, Vol. VIII, No. 1, 1955, pp. 143-202. Burrow, M. D., Invariants of Free Lie Rings, Vol. XI, No. 4, 1958, pp. 419-432.

CARRIER, G. F., Boundary Layer Problems in Applied Mathematics, Vol. VII, No. 1, 1954, pp. 11-18. CESARI, LAMBERTO, On the Calculus of Variations in Two Variables, Vol. IX, No. 3, 1956, pp. 363-372. CHEN, Y. W., Supersonic Flow Through Nozzles With Rotational Symmetry, Vol. V, No. 1, 1952, pp.

—, Flows Through Nozzles and Related Problems of Cylindrical and Spherical Waves, Vol. VI, No. 2, 1953, pp. 179-230.

—, Discontinuity of Solutions of Quasi-Linear Differential Equations in Two Variables, Vol. IX, No. 3, 1956, pp. 373-382.

—, Entire Solutions of a Class of Differential Equations of Mixed Type, Vol. XIV, No. 3, 1961, pp. 229–256. Chu, Ta-Shing, see Karal, F. C., Jr.

COHN, HARVEY, A Numerical Study of Quintics of Small Discriminant, Vol. VIII, No. 3, 1955, pp. 377-

CONLEY, CHARLES, On Some New Long Periodic Solutions of the Plane Restricted Three Body Problem, Vol. XVI, No. 4, 1963, pp. 449–467.

CONN, J., see HIRSCH, W. M.

COPSON, E. T., The Transport of Discontinuities in an Electromagnetic Field, Vol. IV, No. 4, 1951, pp. 427–434.

COURANT, RICHARD, Cauchy's Problem for Hyperbolic Quasi-Linear Systems of First Order Partial Differential Equations in Two Independent Variables, Vol. XIV, No. 3, 1961, pp. 257-266.

—, and Lax, A., Remarks on Cauchy's Problem for Hyperbolic Partial Differential Equations With Constant Coefficients in Several Independent Variables, Vol. VIII, No. 4, 1955, pp. 497–502.

—, and Lax, P. D., On Nonlinear Partial Differential Equations With Two Independent Variables, Vol. II, Nos. 2–3, 1949, pp. 255–274.

—, ISAACSON, E., and REES, M., On the Solution of Nonlinear Hyperbolic Differential Equations by Finite Differences, Vol. V, No. 3, 1952, pp. 243-256.

—, ISAACSON, E., and REES, M., Errata, On the Solution of Nonlinear Hyperbolic Differential Equations by Finite Differences, Vol. V, No. 4, 1952, p. 454.

DIAZ, J. B., On Singular and Regular Cauchy Problems, Vol. IX, No. 3, 1956, pp. 383-390.

DOLPH, C. L., McLAUGHLIN, J. E., and MARX, I., Symmetric Linear Transformations and Complex Quadratic Forms, Vol. VII, No. 4, 1954, pp. 621-632.

DOUGLIS, AVRON, Some Existence Theorems for Hyperbolic Systems of Partial Differential Equations in Two Independent Variables, Vol. V, No. 2, 1952, pp. 119-154.

—, A Function-Theoretic Approach to Elliptic Systems of Equations in Two Variables, Vol. VI, No. 2, 1953, pp. 259–290.

DOUGLIS, AVRON, Uniqueness of Cauchy Problems for Elliptic Systems of Equations, Vol. VI, No. 2, 1953, pp. 291–298.

—, The Problem of Cauchy for Linear, Hyperbolic Equations of Second Order, Vol. VII, No. 2, 1954, pp. 271-296.

—, Observations on Normal Forms of Linear Hyperbolic Equations of Second Order, Vol. VII, No. 4, 1954, pp. 675-696.

-, A Criterion for the Validity of Huygens' Principle, Vol. IX, No. 3, 1956, pp. 391-402.

—, An Ordering Principle and Generalized Solutions of Certain Quasi-Linear Partial Differential Equations, Vol. XII, No. 1, 1959, pp. 87-112.

—, Uniqueness in Cauchy Problems for Elliptic Systems of Equations, Vol. XIII, No. 4, 1960, pp. 593-608.

—, The Continuous Dependence of Generalized Solutions of Non-Linear Partial Differential Equations Upon Initial Data, Vol. XIV, No. 3, 1961, pp. 267-284.

—, and Nirenberg, L., Interior Estimates for Elliptic Systems of Partial Differential Equations, Vol. VIII, No. 4, pp. 503-538.

Dressler, R. F., Mathematical Solution of the Problem of Roll-Waves in Inclined Open Channels, Vol. II, Nos. 2-3, 1949, pp. 149-194.

—, and Pohle, F. V., Resistance Effects on Hydraulic Instability, Vol. VI, No. 1, 1953, pp. 93–96. —, see Friedrichs, K. O.

EBERLEIN, W. F., Notes on Integration 1: The Underlying Convergence Theorem, Vol. X, No. 3, 1957, pp. 357-360.

ERDÉLYI, ARTHUR, Singularities of Generalized Axially Symmetric Potentials, Vol. IX, No. 3, 1956, pp. 403–414.

Feller, William, On Differential Operators and Boundary Conditions, Vol. VIII, No. 1, 1955, pp. 203-216.

-, A Simple Proof for Renewal Theorems, Vol. XIV, No. 3, 1961, pp. 285-294.

Ficken, F. A., The Continuation Method for Functional Equations, Vol. IV, No. 4, 1951, pp. 435-456.

—, An Unusual Parabolic Problem, Vol. XIV, No. 3, 1961, pp. 295-308.

—, and Fleishman, B. A., Initial Value Problems and Time-Periodic Solutions for a Nonlinear Wave Equation, Vol. X, No. 3, 1957, pp. 331-356.

FIFE, PAUL, Non-Linear Deflection of Thin Elastic Plates Under Tension, Vol. XIV, No. 2, 1961, pp. 81-112.

Figueiredo, D. G. De, The Coerciveness Problem for Forms Over Vector Valued Functions, Vol. XVI, No. 1, 1963, pp. 63-94.

FINKELSTEIN, A. B., The Initial Value Problem for Transient Water Waves, Vol. X, No. 4, 1957, pp. 511-522.

FINKELSTEIN, DAVID, On Relations Between Commutators, Vol. VIII, No. 2, 1955, pp. 245-250.

FINN, ROBERT, Growth Properties of Solutions of Non-Linear Elliptic Equations, Vol. IX, No. 3, 1956, pp. 415–424.

—, and GILBARG, D., Asymptotic Behavior and Uniqueness of Plane Subsonic Flows, Vol. X, No. 1, 1957, pp. 23-64.

FLANDERS, D. A., Appendix, Vol. I, No. 3, 1948, pp. 299-302.

FLEISHMAN, B. A., see FICKEN, F. A.

FOGUEL, S. R., A Perturbation Theorem for Scalar Operators, Vol. XI, No. 3, 1958, pp. 293-296.

-, Normal Operators of Finite Multiplicity, Vol. XI, No. 3, 1958, pp. 297-314.

FORMAN, W., and Shapiro, H. N., Abstract Prime Number Theorems, Vol. VII, No. 3, 1954, pp. 587–620.

Forsythe, G. E., Difference Methods on a Digital Computer for Laplacian Boundary Value and Eigenvalue Problems, Vol. IX, No. 3, 1956, pp. 425-434.

FREDERICK, K. N., The Hopfian Property for a Class of Fundamental Groups, Vol. XVI, No. 1, 1963, pp. 1-8.

FRIEDLANDER, F. G., Diffraction of Pulses by a Circular Cylinder, Vol. VII, No. 4, 1954, pp. 705-732.

Friedlander, F. G., and Keller, J. B., Asymptotic Expansions of Solutions of $(\nabla^2 + k^2)u = 0$, Vol. VIII, No. 3, 1955, pp. 387–394.

FRIEDMAN, BERNARD, A Simple Urn Model, Vol. II, No. 1, 1949, pp. 59-70.

-, Note on Approximating Complex Zeros of a Polynomial, Vol. II, Nos. 2-3, 1949, pp. 195-208.

-, Theory of Underwater Explosion Bubbles, Vol. III, No. 2, 1950, pp. 177-200.

-, Propagation in a Non-Homogeneous Atmosphere, Vol. IV, Nos. 2-3, 1951, pp. 317-350.

-, Operators With a Closed Range, Vol. VIII, No. 4, 1955, pp. 539-550.

—, Eigenvalues of Echelon Matrices, Vol. XIV, No. 3, 1961, pp. 309-314.
FRIEDRICHS, K. O., Appendix. On the Derivation of the Shallow Water Theory, Vol. I, No. 1, 1948, pp. 81-88.

-. Water Waves on a Shallow Sloping Beach, Vol. I, No. 2, 1948, pp. 109-134.

-, Formation and Decay of Shock Waves, Vol. I, No. 3, 1948, pp. 211-246.

-, On the Non-Occurrence of a Limiting Line in Transonic Flow, Vol. I, No. 3, 1948, pp. 287-298.

-, On the Perturbation of Continuous Spectra, Vol. I, No. 4, 1948, pp. 361-406

-, Criteria for Discrete Spectra, Vol. III, No. 4, 1950, pp. 439(S85)-449(S95).

- —, Mathematical Aspects of the Quantum Theory of Fields. Parts I and II, Vol. IV, Nos. 2-3, 1951, pp. 161-224.
- -, Mathematical Aspects of the Quantum Theory of Fields. Part III, Vol. V, No. 1, 1952, pp. 1-56.
- -, Mathematical Aspects of the Quantum Theory of Fields. Part IV, Vol. V, No. 4, 1952, pp. 349-412.
- -, Mathematical Aspects of the Quantum Theory of Fields. Part V, Vol. VI, No. 1, 1953, pp. 1-72.
- —, On the Differentiability of the Solutions of Linear Elliptic Differential Equations, Vol. VI, No. 3, 1953, pp. 299–326.
- -, Symmetric Hyperbolic Linear Differential Equations, Vol. VII, No. 2, 1954, pp. 345-392.
- -, Differential Forms on Riemannian Manifolds, Vol. VIII, No. 4, 1955, pp. 551-590.
- -, Symmetric Positive Systems of Differential Equations, Vol. XI, No. 3, 1958, pp. 333-418.

-, and Lewy, H., The Dock Problem, Vol. I, No. 2, 1948, pp. 135-144.

- -, and Hyers, D. H., The Existence of Solitary Waves, Vol. VII, No. 3, 1954, pp. 517-550.
- -, and Dressler, R. F., A Boundary-Layer Theory for Elastic Plates, Vol. XIV, No. 1, 1961, pp. 1-34.
- —, and Rejto, P. A., On a Perturbation Through Which a Discrete Spectrum Becomes Continuous, Vol. XV, No. 2, 1962, pp. 219–236.
- —, and Galindo, A., On the Wave Function Renormalization in a Simple Model, Vol. XV, No. 4, 1962, pp. 427-442.

GAFFNEY, M. P., Asymptotic Distributions Associated With the Laplacian for Forms, Vol. XI, No. 4, 1958, pp. 535—546.

—, The Conservation Property of the Heat Equation on Riemannian Manifolds, Vol. XII, No. 1, 1959, pp. 1–12.

GALINDO, ALBERTO, On the Existence of J-Selfadjoint Extensions of J-Symmetric Operators with Adjoint, Vol. XV, No. 4, 1962, pp. 423—426.

-, see Friedrichs, K. O.

GARABEDIAN, P. R., Oblique Water Entry of a Wedge, Vol. VI, No. 2, 1953, pp. 157-166.

-, Analyticity and Reflection for Plane Elliptic Systems, Vol. XIV, No. 3, 1961, pp. 315-322.

GARDNER, C. S., Time-Dependent Linearized Supersonic Flow Past Planar Wings, Vol. III, No. 1, 1950, pp. 33–38.

- —, A Relation Between Time-Dependent and Steady Linearized Supersonic Flows Past Conical Bodies, Vol. III, No. 1, 1950, pp. 39–44.
- —, and Keller, J. B., The Field of a Pulsed Dipole in an Interface, Vol. XV, No. 2, 1962, pp. 99-108.

 —, see Berkowitz, Jerome

GERJUOY, EDWARD, Total Reflection of Waves From a Point Source, Vol. VI, No. 1, 1953, pp. 73-92.
 GERMAIN, P., Remarks on the Theory of Partial Differential Equations of Mixed Type and Applications to the Study of Transonic Flow, Vol. VII, No. 1, 1954, pp. 117-144.

Giese, J. H., Approximate Methods for Computing Flow Fields, Vol. VII, No. 1, 1954, pp. 65-78. Gilbarg, David, see Finn, Robert

GOLDSTINE, H. H., and NEUMANN, J. von, Blast Wave Calculation, Vol. VIII, No. 2, 1955, pp. 327-354.

GRAD, HAROLD, Note on Straight Pibe Jet Motors, Vol. II. No. 1, 1949, pp. 71-78.

-, Resonance Burining in Rocket Motors, Vol. II, No. 1, 1949, pp. 79-102.

--, Note on N-Dimensional Hermite Polynomials, Vol. II, No. 4, 1949, pp. 325-330.

-, On the Kinetic Theory of Rarefied Gases, Vol. II, No. 4, 1949, pp. 331-407.
-, The Profile of a Steady Plane Shock Wave, Vol V, No. 3, 1952, pp. 257-300.

-, Errata, The Profile of a Steady Plane Shock Wave, Vol. V, No. 4, 1952, pp. 454.

—, Statistical Mechanics, Thermodynamics, and Fluid Dynamics of Systems With an Arbitrary Number of Integrals, Vol. V, No. 4, 1952, pp. 455–494.

-, The Many Faces of Entropy, Vol. XIV, No. 3, 1961, pp. 323-354.

GREENDLINGER, MARTIN, Dehn's Algorithm for the Word Problem, Vol. XIII, No. 1, 1960, pp. 67-84.
—, On Dehn's Algorithms for the Conjugacy and Word Problems With Applications, Vol. XIII, No. 4, 1960, pp. 641-678.

HAHN, S. G., Stability Criteria for Difference Schemes, Vol. XI, No. 2, 1958, pp. 243-256.

HANISCH, H., and HIRSCH, W. M., On a Functional Equation Arising in the Theory of Queues, Vol. XVI, No. 3, 1963, pp. 267–278.

-, and Hirsch, W. M., Properties of a Transient Queue, Vol. XVI, No. 4, 1963, pp. 487-503.

HARTLEY, H. O., Some Recent Developments in Analysis of Variance, Vol. VIII, No. 1, 1955, pp. 47–72. HARTMAN, PHILIP, On the Local Behavior of Solutions of $\Delta u = g(x, u, \nabla u)$, Vol. IX, No. 3, 1956, pp. 435–446.

HAUSNER, MELVIN, Eigenvalues of Certain Operators on Matrices, Vol. XIV, No. 2, 1961, pp. 155–156. Heineman, Marion, Theory of Drag in Highly Rarefied Gases, Vol. I, No. 3, 1948, pp. 259–274. Heins, A. E., The Scope and Limitations of the Method of Wiener and Hopf, Vol. IX, No. 3, 1956, pp.

447-466.

Heinz, Erhard, On the Existence Problem for Surfaces of Constant Mean Curvature, Vol. IX, No. 3, 1956,

pp. 467-470.
Heisenberg, Werner, On the Mathematical Frame of the Theory of Elementary Particles, Vol. IV, No. 1, 1951, pp. 15-22.

HESTENES, M. R., Iterative Computational Methods, Vol. VIII, No. 1, 1955, pp. 85-96.

HIRSCH, W. M., CONN, J., and SIEGEL, C., A Queueing Process With an Absorbing State, Vol. XIV, No. 2, 1961, pp. 137-154.

—, and HOFFMAN, A. J., Extreme Varieties, Concave Functions, and the Fixed Charge Problem, Vol. XIV, No. 3, 1961, pp. 355–370.

-, see Hanisch, H.

Hochstadt, Harry, Asymptotic Formulas for Diffraction by Parabolic Surfaces, Vol. X, No. 3, 1957, pp. 311-330.

-, Asymptotic Estimates for the Sturm-Liouville Spectrum, Vol. XIV, No. 4, 1961, pp. 749-764.

-, see BAZER, J.

HOFFMAN, A. J., see HIRSCH, W. M.

HOPF, EBERHARD, A Mathematical Example Displaying Features of Turbulence, Vol. I, No. 4, 1948, pp. 303-322.

—, The Partial Differential Equation $u_t + uu_x = \mu u_{xx}$, Vol. III, No. 3, 1950, pp. 201–230.

HÖRMANDER, LARS, On Interior Regularity of the Solutions of Partial Differential Equations, Vol. XI, No. 2, 1958, pp. 197-218.

-, Weak and Strong Extensions of Differential Operators, Vol. XIV, No. 3, 1961, pp. 371-380.

Huber, Alfred, On the Reflection Principle for Polyharmonic Functions, Vol. IX, No. 3, 1956, pp. 471-478.

HUDSON, G. E., The Deformation of a Thin Metallic Shell of Non-Uniform Thickness by a Detonation Wave, Vol. VII, No. 1, 1954, pp. 207–222.

—, and Potts, D. H., On a Class of Solutions of Maxwell's Electromagnetic Equations, Vol. IX, No. 1, 1956, pp. 33-44. Hyers, D. H., see Friedrichs, K. O.

ISAACSON, EUGENE, Waves Against an Overhanging Cliff, Vol. I, No. 2, 1948, pp. 201-210.

-, Water Waves Over a Sloping Bottom, Vol. III, No. 1, 1950, pp. 11-32.

-, Error Estimates for Parabolic Equations, Vol. XIV, No. 3, 1961, pp. 381-390.

-, see Courant, Richard

JOHN, FRITZ, Waves in the Presence of an Inclined Barrier, Vol. I, No. 2, 1948, pp. 149-200.

-, On Harmonic Vibrations Out of Phase With the Exciting Force, Vol. 1, No. 4, 1948, pp. 341-360.

-, On the Motion of Floating Bodies I, Vol. II, No. 1, 1949, pp. 13-58.

- —, On Linear Partial Differential Equations With Analytic Coefficients: Unique Continuation of Data, Vol. II, Nos. 2-3, 1949, pp. 209-254.
- -, On the Motion of Floating Bodies II. Simple Harmonic Motions, Vol. III, No. 1, 1950, pp. 45-102.
 -, The Fundamental Solution of Linear Elliptic Differential Equations With Analytic Coefficients, Vol. III,

No. 3, 1950, pp. 273-304.

- -, On Integration of Parabolic Equations by Difference Methods, Vol. V, No. 2, 1952, pp. 155-212.
- —, Derivatives of Continuous Weak Solutions of Linear Elliptic Equations, Vol. VI, No. 3, 1953, pp. 327-336.
- -, Two-Dimensional Potential Flows With a Free Boundary, Vol. VI, No. 4, 1953, pp. 497-504.
- —, Solutions of Second Order Hyperbolic Differential Equations With Constant Coefficients in a Domain With a Plane Boundary, Vol. VII, No. 2, 1954, pp. 245–270.
- -, A Note on "Improper" Problems in Partial Differential Equations, Vol. VIII, No. 4, 1955, pp. 591-594.
- —, Non-Admissible Data for Differential Equations With Constant Coefficients, Vol. X, No. 3, 1957, pp. 391-398.
- —, Plane Strain Problems for a Perfectly Elastic Material of Harmonic Type, Vol. XIII, No. 2, 1960, pp. 239-296.
- —, Continuous Dependence on Data for Solutions of Partial Differential Equations With a Prescribed Bound, Vol. XIII, No. 4, 1960, pp. 551-586.

-, Rotation and Strain, Vol. XIV, No. 3, 1961, pp. 391-414.

- —, and Nirenberg, L., On Functions of Bounded Mean Oscillation, Vol. XIV, No. 3, 1961, pp. 415–426.
 Jones, B. F., Jr., Various Methods for Finding Unknown Coefficients in Parabolic Differential Equations, Vol. XVI, No. 1, 1963, pp. 33–44.
- JONES, D. S., A New Method for Calculating Scattering With Particular Reference to the Circular Disc, Vol. IX, No. 4, 1956, pp. 713–746.
- —, The Unsteady Motion of a Thin Aerofoil in an Incompressible Fluid, Vol. X, No. 1, 1957, pp. 1–22.
 JÖRGENS, KONRAD, An Asymptotic Expansion in the Theory of Neutron Transport, Vol. XI, No. 2, 1958, pp. 219–242.

KANIEL, S., and SCHECHTER, M., Spectral Theory for Fredholm Operators, Vol. XVI, No. 4, 1963, pp. 423-448.

KANN, EDGAR, Bonnet's Theorem in Two-Dimensional G-Spaces, Vol. XIV, No. 4, 1961, pp. 765-784.

KAPLAN, STANLEY, On the Growth of Solutions of Quasi-Linear Parabolic Equations, Vol. XVI, No. 3, 1963, pp. 305-330.

KARAL, F. C., JR., and KARP, S. N., Diffraction of a Skew Plane Electromagnetic Wave by an Absorbing Right-Angled Wedge, Vol. XI, No. 4, 1958, pp. 495-534.

- —, and KARP, S. N., Vertex Excited Surface Waves on Both Faces of a Right-Angled Wedge, Vol. XII, No. 3, 1959, pp. 435-456.
- —, and KARP, S. N., The Elastic-Field Behavior in the Neighborhood of a Crack of Arbitrary Angle, Vol. XV, No. 4, 1962, pp. 413–422.
- —, KARP, S. N., CHU, T. and KOUYOUMJIAN, R. G., Scattering of a Surface Wave by a Discontinuity in the Surface Reactance on a Right-Angled Wedge, Vol. XIV, No. 1, 1961, pp. 35–48.
- KARP, S. N., Wiener-Hopf Techniques and Mixed Boundary Value Problems, Vol. III, No. 4, 1950, pp. 411(S57)-426(S72).
- —, Two Dimensional Green's Function for a Right-Angled Wedge Under an Impedance Boundary Condition, Vol. XIII, No. 2, 1960, pp. 203-216.

- KARP, S. N., A Convergent 'Farfield' Expansion for Two-Dimensional Radiation Functions, Vol. XIV, No. 3, 1961, pp. 427-434.
- -, see Karal, F. C., Jr.
- -, see Morgan, R. C.
- KARRASS, A., and SOLITAR, D., Subgroup Theorems in the Theory of Groups Given by Defining Relations, Vol. XI. No. 4, 1958, pp. 547-572.
- —, Magnus, W., and Solitar, D., Elements of Finite Order in Groups With a Single Defining Relation, Vol. XIII, No.1, 1960, pp. 57-66.
- KATO, TOSIO, On Linear Differential Equations in Banach Spaces, Vol. IX, No. 3, 1956, pp. 479–486.
 —, On the Eigenfunctions of Many-Particle Systems in Quantum Mechanics, Vol. X, No. 2, 1957, pp. 151–178
- -, On Positive Eigenvectors of Positive Infinite Matrices, Vol. XI, No. 4, 1958, pp. 573-586.
- —, Growth Properties of Solutions of the Reduced Wave Equation With a Variable Coefficient, Vol. XII, No. 3, 1959, pp. 403–426.
- KAY, IRVIN, The Diffraction of an Arbitrary Pulse by a Wedge, Vol. VI, No. 3, 1953, pp. 419-434.

 —, The Inverse Scattering Problem When the Reflection Coefficient is a Rational Function, Vol. XIII, No. 3,
- 1960, pp. 371-394.
 —, and Moses, H. E., A Simple Verification of the Gelfand-Levitan Equation for the Three-Dimensional Scattering Problem, Vol. XIV, No. 3, 1961, pp. 435-446.
- Keller, H. B., On the Solution of Semi-Linear Hyperbolic Systems by Unconditionally Stable Difference Methods, Vol. XIV. No. 3, 1961, pp. 447-456.
- —, and Wendroff, B., On the Formulation and Analysis of Numerical Methods for Time Dependent Transport Equations, Vol. X, No. 4, 1957, pp. 567-582.
- —, and Reiss, E. L., Iterative Solutions for the Non-Linear Bending of Circular Plates, Vol. XI, No. 3, 1958, pp. 273-292.
- —, and Thomée, V., Unconditionally Stable Difference Methods for Mixed Problems for Quasi-Linear Hyperbolic Systems in Two Dimensions, Vol. XV, No. 1, 1962, pp. 63–74.
- Keller, J. B., On the Solution of the Boltzmann Equation for Rarefied Gases, Vol. I, No. 3, 1948, pp. 275–286.
- -, The Solitary Wave and Periodic Waves in Shallow Water, Vol. I, No. 4, 1948, pp. 323-340.
- -, Bowing of Violin Strings, Vol. VI, No. 4, 1953, pp. 483-495.
- -, The Scope of the Image Method, Vol. VI, No. 4, 1953, pp. 505-512.
- —, On Solutions of $\Delta u = f(u)$, Vol. X, No. 4, 1957, pp. 503-510.
- -, On Solutions of Nonlinear Wave Equations, Vol. X, No. 4, 1957, pp. 523-530.
- —, Simple Proofs of the Theorems of J. S. Lomont and H. E. Moses on the Decomposition and Representation of Vector Fields, Vol. XIV, No. 1, 1961, pp. 77-80.
- —, and Blank A., Diffraction and Reflection of Pulses by Wedges and Corners, Vol. IV, No. 1, 1951, pp. 75-94.
- —, and Wettz, M., Reflection and Transmission Coefficients for Waves Entering or Leaving an Icefield, Vol. VI, No. 3, 1953, pp. 415–418.
- —, Lewis, R. M., and Seckler, B. D., Asymptotic Solution of Some Diffraction Problems, Vol. IX, No. 2, 1956, pp. 207–266.
- —, and Magiros, D. G., Diffraction by a Semi-Infinite Screen With a Rounded End, Vol. XIV, No. 3, 1961, pp. 457–472.
- -, see AVILA, G. S. S.
- -, see Buchal, R. N.
- -, see Friedlander, F. G.
- -, see GARDNER, C. S.
- -, see LEVY, B. R.
- -, see Levy, D. M.
- -, see Wertz, M.
- KLINE, MORRIS, An Asymptotic Solution of Maxwell's Equations, Vol. IV, Nos. 2-3, 1951, pp. 225-262.

KLINE, MORRIS, Asymptotic Solutions of Maxwell's Equations Involving Fractional Powers of the Frequency, Vol. VIII, No. 4, 1955, pp. 595-614.

—, A Note on the Expansion Coefficients of Geometrical Optics, Vol. XIV, No. 3, 1961, pp. 473–480.
KLOTZ, TILLA, On G. Bol's Proof of Caratheodory's Conjecture, Vol. XII, No. 2, 1959, pp. 277–312.
KOLODNER, I. I., On the Linearized Theory of Supersonic Flows Through Axially Symmetrical Ducts, Vol. III, No. 2, 1950, pp. 133–152.

Heavy Rotating String—A Nonlinear Eigenvalue Problem, Vol. VIII, No. 3, 1955, pp. 395-408.
 Free Boundary Problem for the Heat Equation With Applications to Problems of Change of Phase, Vol. IX, No. 1, 1956, pp. 1-32.

-, see Morawetz, C. S.

KOOSIS, PAUL, On Functions Which are Mean Periodic on a Half-Line, Vol. X, No. 1, 1957, pp. 133–150.
—, Interior Compact Spaces of Functions on a Half-Line, Vol. X, No. 4, 1957, pp. 583–616.

KOPPELMAN, WALTER, The Riemann-Hilbert Problem for Finite Riemann Surfaces, Vol. XII, No. 1, 1959, pp. 13-36.

KOUYOUMJIAN, R. G., see KARAL, F. C., JR.

KRAICHNAN, R. H., see LEWIS, R. M.

Kraus, L., and Levine, L. M., Diffraction by an Elliptic Cone, Vol. XIV, No. 1, 1961, pp. 49-68.

Kruskal, Martin, The Bridge Theorem for Minimal Surfaces, Vol. VII, No. 2, 1954, pp. 297-316.

Ladyzhenskaia, O. A., Solution "in the Large" of the Non-Stationary Boundary Value Problem for the Navier-Stokes System With Two Space Variables, Vol. XII, No. 3, 1959, pp. 427-434.

—, and URAL'TZEVA, N. N., On the Smoothness of Weak Solutions of Quasi-Linear Equations in Several Variables and of Variational Problems, Vol. XIV, No. 3, 1961, pp. 481-496.

LANGER, R. E., Asymptotic Solutions of a Differential Equation in the Theory of Microwave Propagation, Vol. III, No. 4, 1950, pp. 427(S73)-438(S84).

LAX, Annell, Decaying Shocks, Vol. I, No. 3, 1948, pp. 247-258.

—, On Cauchy's Problem for Partial Differential Equations With Multiple Characteristics, Vol. IX, No. 2, 1956, pp. 135-170.

-, see Courant, Richard

Lax, P. D., A Remark on the Method of Orthogonal Projections, Vol. IV, No. 4, 1951, pp. 457-464.

-, Nonlinear Hyperbolic Equations, Vol. VI, No. 2, 1953, pp. 231-258.

—, Weak Solutions of Nonlinear Hyperbolic Equations and Their Numerical Computation, Vol. VII, No. 1, 1954, pp. 159–194.

-, Symmetrizable Linear Transformations, Vol. VII, No. 4, 1954, pp. 633-648.

-, Reciprocal Extremal Problems in Function Theory, Vol. VIII, No. 3, 1955, pp. 437-454.

—, On Cauchy's Problem for Hyperbolic Equations and the Differentiability of Solutions of Elliptic Equations, Vol. VIII, No. 4, 1955, pp. 615–634.

—, A Stability Theorem for Solutions of Abstract Differential Equations, and its Application to the Study of the Local Behavior of Solutions of Elliptic Equations, Vol. IX, No. 4, 1956, pp. 747-766.

—, A Phragmen-Lindelöf Theorem in Harmonic Analysis and Its Application to Some Questions in the Theory of Elliptic Equations, Vol. X, No. 3, 1957, pp. 361–390.

-, Hyperbolic Systems of Conservation Laws II, Vol. X, No. 4, 1957, pp. 537-566.

—, Remarks on the Preceding Paper (see, Koosis, PAUL, Interior Compact Spaces of Functions on a Half-Line), Vol. X, No. 4, 1957, pp. 617-622.

—, Differential Equations, Difference Equations and Matrix Theory, Vol. XI, No. 2, 1958, pp. 175–194.
 —, On the Stability of Difference Approximations to Solutions of Hyperbolic Equations With Variable Coefficients, Vol. XIV, No. 3, 1961, pp. 497–520.

-, An Inequality for Functions of Exponential Type, Vol. XVI, No. 2, 1963, pp. 241-246.

—, and RICHTMYER, R. D., On the Stability of Linear Finite Difference Equations, Vol. IX, No. 2, 1956, pp. 267–294.

-, and WENDROFF, B., Systems of Conservation Laws, Vol. XIII, No. 2, 1960, pp. 217-238.

—, and Phillips, R. S., Local Boundary Conditions for Dissipative Symmetric Linear Differential Operators, Vol. XIII, No. 3, 1960, pp. 427-456. LAX, P. D., and WENDROFF, B., On the Stability of Difference Schemes, Vol. XV, No. 4, 1962, pp. 363-372.

—, MORAWETZ, C. S., and PHILLIPS, R. S., Exponential Decay of Solutions of the Wave Equation in the Exterior of a Star-Shaped Obstacle, Vol. XVI, No. 4, 1963, pp. 477-486.

-, see Courant, Richard.

Leavitt, J, and Ungar, P., Circle Supports the Largest Sandpile, Vol. XV, No. 1, 1962, pp. 35–38.

Lehman, R. S., Developments in the Neighborhood of the Beach of Surface Waves Over an Inclined Bottom, Vol. VII, No. 3, 1954, pp. 393–440.

—, and Lewy, H., Uniqueness of Water Waves on a Sloping Beach, Vol. XIV, No. 3, 1961, pp. 521-546.
Lehner, Joseph, An Unsymmetric Operator Arising in the Theory of Neutron Diffusion, Vol. IX, No. 3, 1956, pp. 487-498.

—, and Wing, G. M., On the Spectrum of an Unsymmetric Operator Arising in the Transport Theory of Neutrons, Vol. VIII, No. 2, 1955, pp. 217-234.

LEVINE, H., and Schwinger, J., On the Theory of Electromagnetic Wave Diffraction by an Aperture in an Infinite Plane Conducting Screen, Vol. III, No. 4, 1950, pp. 355(S1)-392(S38).

LEVINE, L. M., see KRAUS, L.

LEVY, B. R., and KELLER, J. B., Diffraction by a Smooth Object, Vol. XII, No. 1, 1959, pp. 159-210.
LEVY, D. M., and KELLER, J. B., Instability Intervals of Hill's Equation, Vol. XVI, No. 4, 1963, pp. 469-476.

LEWIS, R. M., and KRAICHNAN, R. H., A Space-Time Functional Formalism for Turbulence, Vol. XV, No. 4, 1962, pp. 397–412.

-, see Keller, J. B.

Lewy, Hans, On Minimal Surfaces With Partially Free Boundary, Vol. IV, No. 1, 1951, pp. 1-14.

—, On Steady Free Surface Flow in a Gravity Field, Vol. V, No. 4, 1952, pp. 413-414.

—, On the Relations Governing the Boundary Values of Analytic Functions of Two Complex Variables, Vol. IX, No. 2, 1956, pp. 295–298.

-, On Hulls of Holomorphy, Vol. XIII, No. 4, 1960, pp. 587-592.

-, see Friedrichs, K. O.

-, see Lehman, R. S.

LIGHTHILL, M. J., On the Squirming Motion of Nearly Spherical Deformable Bodies Through Liquids at Very Small Reynolds Numbers, Vol. V, No. 2, 1952, pp. 109–118.

-- Mathematical Methods in Compressible Flow Theory, Vol. VII, No. 1, 1954, pp. 1-10.

LIN, C. C., see VON KARMAN, T.

LIPSCHUTZ, SEYMOUR, Elements in S-Groups With Trivial Centralizers, Vol. XIII, No. 4, 1960, pp. 679-684.

-, On Square Roots in Eighth-Groups, Vol. XV, No. 1, 1962, pp. 39-44.

LITTMAN, WALTER, On the Existence of Periodic Waves Near Critical Speed, Vol. X, No. 2, 1957, pp. 241-270.

—, Remarks on the Dirichlet Problem for General Linear Partial Differential Equations, Vol. XI, No. 1, 1958, pp. 145–152.

LOMONT, J. S., and Moses, H. E., An Angular Momentum Helmholtz Theorem, Vol. XIV, No. 1, 1961, pp. 69-76.

LORCH, L., and NEWMAN, D. J., On the [F, d_n] Summation of Fourier Series, Vol. XV, No. 2, 1962, pp. 109–118.

LOTKIN, MARK, Some Problems Solvable on Computing Machines, Vol. VII, No. 1, 1954, pp. 149-158. LOWELL, S. C., The Propagation of Waves in Shallow Water, Vol. II, Nos. 2-3, 1949, pp. 275-292. LUDFORD, G. S. S., and MARTIN, M. H., One-Dimensional Anisentropic Flows, Vol. VII, No. 1, 1954,

pp. 45-64.

Ludwig, Donald, Exact and Asymptotic Solutions of the Cauchy Problem, Vol. XIII, No. 3, 1960, pp.

473-508.

—, Conical Refraction in Crystal Optics and Hydromagnetics, Vol. XIV, No. 2, 1961, pp. 113-124.

McLaughlin, J. E., see Dolph, C. L.

MAGIROS, D. G., see KELLER, J. B.

MAGNUS, WILHELM, On the Exponential Solution of Differential Equations for a Linear Operator, Vol. VII, No. 4, 1954, pp. 649-674.

—, and OBERHETTINGER, F., On Systems of Linear Equations in the Theory of Guided Waves, Vol. III, No. 4, 1950, pp. 393(S39)-410(S56).

-, see Karrass, A.

MARCUVITZ, NATHAN, Field Representations in Spherically Stratified Regions, Vol. IV, Nos. 2-3, 1951, pp. 263-316.

MARTENS, H. H., Torelli's Theorem and a Generalization for Hyper-Elliptic Surfaces, Vol. XVI, No. 2, 1963, pp. 97-110.

MARTIN, M. H., An Existence and Uniqueness Theorem for Unsteady One-Dimensional Anisentropic Flow, Vol. VIII, No. 3, 1955, pp. 367-370.

-, see Ludford, G. S. S.

MARX, IMANUEL, On the Classification of Unstable Minimal Surfaces with Polygonal Boundaries, Vol. VIII, No. 2, 1955, pp. 235–244.

-, see DOLPH, C. L.

MAYER, J. E., Two Unsolved Problems of Statistical Mechanics, Vol. VIII, No. 1, 1955, pp. 73-84.
MILLER, K. S., and Shapiro, H. S., On the Linear Independence of Laplace Integral Solutions of Certain Differential Equations, Vol. XIV, No. 2, 1961, pp. 125-136.

MIRANKER, W. L., The Reduced Wave Equation in a Medium With a Variable Index of Refraction, Vol. X, No. 4, 1957, pp. 491-502.

MIZCHATA, SIGERU, Analyticity of Solutions of Hyperbolic Systems With Analytic Coefficients, Vol. XIV, No. 3, 1961, pp. 547-560.

MONTROLL, E. W., Markoff Chains, Wiener Integrals, and Quantum Theory, Vol. V, No. 4, 1952, pp. 415–453.

—, and Berlin, T. H., An Analytical Approach to the Ising Problem, Vol. IV, No. 1, 1951, pp. 23–30. Morawetz, C. S., A Uniqueness Theorem for Frankl's Problem, Vol. VII, No. 4, 1954, pp. 697–704.

On the Non-Existence of Continuous Transonic Flows Past Profiles I, Vol. IX, No. 1, 1956, pp. 45-68.
 On the Non-Existence of Continuous Transonic Flows Past Profiles II, Vol. X, No. 1, 1957, pp. 107-132.

On the Non-Existence of Continuous Transonic Flows Past Profiles III, Vol. XI, No. 1, 1958, pp. 129-144.

—, A Weak Solution for a System of Equations of Elliptic-Hyperbolic Type, Vol. XI, No. 3, 1958, pp. 315-332.

—, The Decay of Solutions of the Exterior Initial Boundary Value Problem for the Wave Equation, Vol. XIV, No. 3, 1961, pp. 561–568.

-, The Limiting Amplitude Principle, Vol. XV, No. 3, 1962, pp. 349-362.

—, A Uniqueness Theorem for the Relativistic Wave Equation, Vol. XVI, No. 3, 1963, pp. 353-362.
 —, and KOLODNER, I. I., On the Non-Existence of Limiting Lines in Transonic Flows, Vol. VI, No. 1, 1953, pp. 97-102.

-, see Lax, P. D.

MORGAN, R. C., and KARP, S. N., Uniqueness Theorem for a Surface Wave Problem in Electromagnetic Diffraction Theory, Vol. XVI, No. 1, 1963, pp. 45-56.

MORIKAWA, G. K., Nonlinear Diffusion of Flood Waves in Rivers, Vol. X, No. 2, 1957, pp. 291-304.
MORREY, C. B., JR., On the Derivation of the Equations of Hydrodynamics From Statistical Mechanics, Vol. VIII, No. 2, 1955, pp. 279-326.

—, A Variational Method in the Theory of Harmonic Integrals, Vol. IX, No. 3, 1956, pp. 499-508. —, The Parametric Variational Problem for Double Integrals, Vol. XIV, No. 3, 1961, pp. 569-576.

—, and Nirenberg, L., On the Analyticity of the Solutions of Linear Elliptic Systems of Partial Differential Equations, Vol. X, No. 2, 1957, pp. 271-290.

MORSE, P. M., Operations Research, Vol. VIII, No. 1, 1955, pp. 1-12.

MOSER, JÜRGEN, Singular Perturbation of Eigenvalue Problems for Linear Differential Equations of Even Order, Vol. VIII, No. 2, 1955, pp. 251-278. Moser, Jürgen, Nonexistence of Integrals for Canonical Systems of Differential Equations, Vol. VIII, No. 3. 1955, pp. 409-436.

-, The Analytic Invariants of an Area-Preserving Mapping Near a Hyperbolic Fixed Point, Vol. IX, No. 4. 1956, pp. 673-692.

-. New Aspects in the Theory of Stability of Hamiltonian Systems, Vol. XI, No. 1, 1958, pp. 81-114.

-, On the Generalization of a Theorem of A. Liapounoff, Vol. XI, No. 2, 1958, pp. 257-272,

-, A New Proof of de Giorgi's Theorem Concerning the Regularity Problem for Elliptic Differential Equations, Vol. XIII, No. 3, 1960, pp. 457-468.

-, On Harnack's Theorem for Elliptic Differential Equations, Vol. XIV, No. 3, 1961, pp. 577-592, Moses, H. E., see KAY, IRVIN

-, see LOMONT, I. S.

MÜLLER, CLAUS, On the Behavior of the Solutions of the Differential Equations $\Delta U = F(x, U)$ in the Neighborhood of a Point, Vol. VII, No. 3, 1954, pp. 505-516.

-, A New Method for Solving Fredholm Integral Equations, Vol. VIII, No. 4, 1955, pp. 635-640.

NEUGEBAUER, OTTO, Appollonius' Planetary Theory, Vol. VIII, No. 4, 1955, pp. 641-648.

-, Notes on Kepler, Vol. XIV, No. 3, 1961, pp. 593-598.

NEWMAN, D. J., see LORCH, L.

NEWMAN, M., and TAUSSKY, O., On a Generalization of the Normal Basis in Abelian Algebraic Number Fields, Vol. IX, No. 1, 1956, pp. 85-92.

NEYMAN, JERZY, The Problem of Inductive Inference, Vol. VIII, No. 1, 1955, pp. 13-46.

NIRENBERG, LOUIS, On Nonlinear Elliptic Partial Differential Equations and Hölder Continuity, Vol. VI, No. 1, 1953, pp. 103-156.

-, A Strong Maximum Principle for Parabolic Equations, Vol. VI, No. 2, 1953, pp. 167-178.

-, The Weyl and Minkowski Problems in Differential Geometry in the Large, Vol. VI, No. 3, 1953, pp. 337-394.

-, Addendum to On Nonlinear Elliptic Partial Differential Equations and Hölder Continuity, Vol. VI, No. 3, 1953, pp. 395-396.

-, Remarks on Strongly Elliptic Partial Differential Equations, Vol. VIII, No. 4, 1955, pp. 649-

-, Estimates and Existence of Solutions of Elliptic Equations, Vol. IX, No. 3, 1956 pp. 509-530.

-, Uniqueness in Cauchy Problems for Differential Equations With Constant Leading Coefficients, Vol. X, No. 1, 1957, pp. 89-106.

-, and TREVES, F. J., Solvability of a First Order Linear Partial Differential Equation, Vol. XVI, No. 3, 1963, pp. 331-352.

-, see AGMON, SHMUEL

-, see Douglis, Avron

-, see John, Fritz

-, see Morrey, C. B., Jr.,

OBERHETTINGER, FRITZ, Diffraction of Waves by a Wedge, Vol. VII, No. 3, 1954, pp. 551-564.

-, see Magnus, Wilhelm

OSSERMAN, ROBERT, Proof of a Conjecture of Nirenberg, Vol. XII, No. 2, 1959, pp. 229-232.

-, Remarks on Minimal Surfaces, Vol. XII, No. 2, 1959, pp. 233-240.

PARTER, S. V., On Mappings of Multiply Connected Domains by Solutions of Partial Differential Equations, Vol. XIII, No. 2, 1960, pp. 167-182.

PAYNE, L. E., New Isoperimetric Inequalities for Eigenvalues and Other Physical Quantities, Vol. IX, No. 3, 1956. pp. 531-542.

PEDERSON, R. N., On the Unique Continuation Theorem for Certain Second and Fourth Order Elliptic Equations, Vol. XI, No. 1, 1958, pp. 67-80.

PEETRE, JAAK, Another Approach to Elliptic Boundary Problems, Vol. XIV, No. 4, 1961, pp. 711-732. -, A Proof of the Hypoellipticity of Formally Hypoelliptic Differential Operators, Vol. XIV, No. 4,

1961, pp. 737-744.

Peters, A. S., A New Treatment of the Ship Wave Problem, Vol. II, Nos. 2-3, 1949, pp. 123-148.

Peters, A. S., The Effect of a Floating Mat on Water Waves, Vol. III, No. 4, 1950, pp. 319-354.

—, Water Waves Over Sloping Beaches and the Solution of a Mixed Boundary Value Problem for $\Delta^2 \phi - k^2 \phi = 0$ in a Sector, Vol. V, No. 1, 1952, pp. 87-108.

—, A Note on the Integral Equation of the First Kind With a Cauchy Kernel, Vol. XVI, No. 1, 1963, pp. 57-62.

—, and Stoker, J. J., A Uniqueness Theorem and a New Solution for Sommerfeld's and Other Diffraction Problems, Vol. VII, No. 3, 1954, pp. 565-586.

 - , and Stoker, J. J., The Motion of a Ship, as a Floating Rigid Body, in a Seaway, Vol. X, No. 3, 1957, pp. 399–490.

—, and STOKER, J. J., Solitary Waves in Liquids Having Non-Constant Density, Vol. XIII, No. 1, 1960 pp. 115-164.

PHILLIPS, R. S., Dissipative Operators and Parabolic Partial Differential Equations, Vol. XII, No. 2, 1959, pp. 249–276.

-, see Lax. P. D.

PLEIJEL, ÅKE, On the Eigenvalues and Eigenfunctions of Elastic Plates, Vol. III, No. 1, 1950, pp. 1-10.

—, Remarks on Courant's Nodal Line Theorem, Vol. IX, No. 3, 1956, pp. 543-550.

PLIS, ANTONI, A Smooth Linear Elliptic Differential Equation Without any Solution in a Sphere, Vol. XIV, No. 3, 1961, pp. 599-618.

Pohle, F. V., see Dressler, R. F.

PORITSKY, HILLEL, Extension of Weyl's Integral for Harmonic Spherical Waves to Arbitrary Wave Shapes, Vol. IV, No. 1, 1951, pp. 33-42.

POTTS, D. H., see HUDSON, G. E.

PROTTER, M. H., see AGMON, SHMUEL

RAGAB, F. M., The Inverse Laplace Transform of an Exponential Function, Vol. XI, No. 1, 1958, pp. 115-128.

RAUCH, H. E., Weierstrass Points, Branch Points, and Moduli of Riemann Surfaces, Vol. XII, No. 3, 1959, pp. 543-560.

—, Addendum to Weierstrass Points, Branch Points, and Moduli of Riemann Surfaces, Vol. XIII, No. 1, 1960, pp. 165-166.

REES, MINA, see COURANT, RICHARD

Reiss, E. L., A Theory of the Small Rotationally Symmetric Deformations of Cylindrical Shells, Vol. XIII, No. 3, 1960, pp. 531–550.

-, see Keller, H. B.

Reissner, Eric, The Edge Effect in Symmetric Bending of Shallow Shells of Revolution, Vol. XII, No. 2, 1959, pp. 385–398.

REJTO, P. A., On Gentle Perturbations I, Vol. XVI, No. 3, 1963, pp. 279-304.

-, see FRIEDRICHS, K. O.

RICE, S. O., Reflection of Electromagnetic Waves From Slightly Rough Surfaces, Vol. IV, Nos, 2-3, 1951, pp. 351-378.

RICHTMYER, R. D., Taylor Instability in Shock Acceleration of Compressible Fluids, Vol. XIII, No. 2, 1960, pp. 297–320.

-, see Lax, P. D.

RIESZ, MARCEL, A Geometric Solution of the Wave Equation in Space-Time of Even Dimension, Vol. XIII, No. 3, 1960, pp. 329–352.

RIVLIN, T. J., and SHAPIRO, H. S., Some Uniqueness Problems in Approximation Theory, Vol. XIII, No. 1, 1960, pp. 35-48.

ROBINSON, ABRAHAM, On the Motion of Small Particles in a Potential Field of Flow, Vol. IX, No. 1, 1956, pp. 69-84.

RODLITZ, ESTHER, Locally Trivial Deformations of Open Riemann Surfaces, Vol. XIV, No. 2, 1961, pp. 157-170.

ROSEAU, MAURICE, Short Waves Parallel to the Shore Over a Sloping Beach, Vol. XI, No. 4, 1958, pp. 433-494.

ROSEAU, MAURICE, Diffraction of Elastic Waves in a Homogeneous Medium Clamped Along a Half-Plane Vol. XII, No. 1 1959, pp. 67–86.

ROSENFELD, N. S., The Eigenvalues of a Class of Singular Differential Operators, Vol. XIII, No. 3, 1960. pp. 395-406.

Rossi, Hugo, On Envelopes of Holomorphy, Vol. XVI, No. 1, 1963, pp. 9-18.

ROTA, G. C., Extension Theory of Differential Operators I, Vol. XI, No. 1, 1958, pp. 23-66.

-, On Models for Linear Operators, Vol. XIII, No. 3, 1960, pp. 469-472.

ROTHE, E. H., Remarks on the Application of Gradient Mappings to the Calculus of Variations and the Connected Boundary Value Problems in Partial Differential Equations, Vol. IX, No. 3, 1956, pp. 551–568.

RUBIN, HANAN, The Dock of Finite Extent, Vol. VII, No. 2, 1954, pp. 317–344.

-, and Ungar, P., Motion Under a Strong Constraining Force, Vol. X, No. 1, 1957, pp. 65-88.

Rydbeck, O. E. H., The Theory of Magneto Ionic Triple Splitting, Vol. IV, No. 1, 1951, pp. 129–160. Sakurai, Akira, On the Problem of a Shock Wave Arriving at the Edge of a Gas, Vol. XIII, No. 3, 1960, pp. 353–370.

SARASON, LEONARD, On Weak and Strong Solutions of Boundary Value Problems, Vol. XV, No. 3, 1962, pp. 237–288.

-, On Boundary Value Problems for Hyperbolic Equations, Vol. XV, No. 4, 1962, pp. 373-396.

Schardin, Hubert, Measurement of Spherical Shock Waves, Vol. VII, No. 1, 1954, pp. 223–244.
 Schechter, Martin, Coerciveness of Linear Partial Differential Operators for Functions Satisfying Zero Dirichlet-Type Boundary Data, Vol. XI, No. 2, 1958, pp. 153–174.

—, Integral Inequalities for Partial Differential Operators and Functions Satisfying General Boundary Conditions, Vol. XII, No. 1, 1959, pp. 37-66.

—, Solution of the Dirichlet Problem for Systems Not Necessarily Strongly Elliptic, Vol. XII, No. 2, 1959, pp. 241-248.

—, General Boundary Value Problems for Elliptic Partial Differential Equations, Vol. XII, No. 3, 1959, pp. 457-486.

-, Remarks on Elliptic Boundary Value Problems, Vol. XII, No. 4, 1959, pp. 561-578.

-, Mixed Boundary Problems for General Elliptic Equations, Vol. XIII, No. 12, 1960, pp. 183-202.

—, On the Dirichlet Problem for Second Order Elliptic Equations With Coefficients Singular at the Boundary, Vol. XIII, No. 2, 1960, pp. 321-328.

-, Various Types of Boundary Conditions for Elliptic Equations, Vol. XIII, No. 3, 1960, pp. 407-426.

-, Observations Concerning a Paper of Peetre, Vol. XIV, No. 4, 1961, pp. 733-736.

-, see KANIEL, S.

Schechter, Samuel, Relaxation Methods for Linear Equations, Vol. XII, No. 2, 1959, pp. 313-336. Schelkunoff, S. A., Kirchhoff's Formula, Its Vector Analogue, and Other Field Equivalence Theorems, Vol. IV, No. 1, 1951, pp. 43-60.

-, Remarks Concerning Wave Propagation in Stratified Media, Vol. IV, No. 1, 1951, pp. 117-128.

Schwartz, J. T., Two Perturbation Formulae, Vol. VIII, No. 3, 1955, pp. 371-376.

—, Another Proof of E. Hopf's Ergodic Lemma, Vol. XII, No. 2, 1959, pp. 399-402,

—, On Nash's Implicit Functional Theorem, Vol. XIII, No. 3, 1960, pp. 509-530.

-, Some Non-Selfadjoint Operators, Vol. XIII, No. 4, 1960, pp. 609-640.

—, Some Non-Selfadjoint Operators. II. A Family of Operators Yielding to Friedrichs' Method, Vol. XIV, No. 3, 1961, pp. 619-628.

—, A Remark on Inequalities of Calderon-Zygmund Type for Vector-Valued Functions, Vol. XIV, No. 4, 1961, pp. 785-799.

-, Compact Positive Mappings in Lebesgue Spaces, Vol. XIV, No. 4, 1961, pp. 693-706.

—, Some Results on the Spectra and Spectral Resolutions of a Class of Singular Integral Operators, Vol. XV, No. 1, 1962, pp. 75–90.

SCHWARTZ, J. T., On Spectral Operators in Hilbert Space With Compact Imaginary Part, Vol. XV, No. 1, 1962, pp. 95–98.

—, Subdiagonalization of Operators in Hilbert Space With Compact Imaginary Part, Vol. XV, No. 2, 1962, pp. 159–172.

- SCHWARTZ J. T., Two Finite, Non-Hyperfinite, Non-Isomorphic Factors, Vol. XVI, No. 1, 1963, pp. 19-26.
- -, Non-Isomorphism of a Pair of Factors of Type III, Vol. XVI, No. 2, 1963, pp. 111-120.
- -, Type II Factors in a Central Decomposition, Vol. XVI, No. 3, 1963, pp. 247-252.
- —, Compact Analytical Mappings of B-Spaces and a Theorem of Jane Cronin, Vol. XVI, No. 3, 1963, pp. 253-260.
- SCHWINGER, JULIAN, see LEVINE, H.
- SECKLER, B. D., see KELLER, J. B.
- Seidman, T. I., Linear Transformations of a Functional Integral I, Vol. XII, No. 4, 1959, pp. 611 622.
- -, Correction, Vol. XVI, No. 1, 1963, pp. 95-96.
- Senior, T. B. A., Diffraction by an Imperfectly Conducting Wedge, Vol. XII, No. 2, 1959, pp. 337-372.
 Shapiro, H. N., Some Assertions Equivalent to the Prime Number Theorem for Arithmetic Progressions, Vol. II, Nos. 2-3, 1949, pp. 293-308.
- -, An Elementary Proof of the Prime Ideal Theorem, Vol. II, No. 4, 1949, pp. 309-324.
- ---, On the Iterates of a Certain Class of Arithmetic Functions, Vol. III, No. 3, 1950, pp. 259-272.
- -, Note on a Computation Method in the Theory of Games, Vol. XI, No. 4, 1958, pp. 587-593.
- -, On a Theorem Concerning Exponential Polynomials, Vol. XII, No. 3, 1959, pp. 487-500.
- -, Tauberian Theorems and Elementary Prime Number Theory, Vol. XII, No. 4, 1959, pp. 579-610.
- Extensions of the Khinchine-Wisser Theorem, Vol. XIII, No. 1, 1960, pp. 15-34.
- —, and WARGA, J., On the Representation of Large Integers as Sums of Primes, Part I. Vol. III, No. 2, 1950, pp. 153-176.
- -, see FORMAN, W.
- Shapiro, H. S., The Expansion of Mean-Periodic Functions in Series of Exponentials, Vol. XI, No. 1, 1958, pp. 1-22.
- —, Numbers and Functions Computable by Means of Rational Recurrence Formulae, Vol. XII, No. 3, 1959, pp. 513-522.
- -, see MILLER, K. S.
- -, see RIVLIN, T. J.,
- SHIELDS, ALLEN, On Quotients of Exponential Polynomials, Vol. XVI, No. 1, 1963, pp. 27-32.
- SHIFFMAN, MAX, On Free Boundaries of an Ideal Fluid, Vol. I, No. 1, 1948, pp. 89-100.
- -, On Free Boundaries of an Ideal Fluid II, Vol. II, No. 1, 1949, pp. 1-12.
- —, and Spencer, D. C., The Force of Impact on a Cone Striking a Water Surface (Vertical Entry), Vol. IV, No. 4, 1951, pp. 379-418.
- SIEGEL, C. L., Zur Theorie der Modulfunktionen n-ten Grades, Vol. VIII, No. 4, 1955, pp. 677-681.

 —, Vereinfachter Beweis eines Satzes von J. Moser, Vol. X, No. 3, 1957, pp. 305-310.
- Siegel, Carol, see Hirsch, W. M.
- SILVERMAN, R. A., A Matching Theorem for Locally Stationary Random Processes, Vol. XII, No. 2, 1959, pp. 373-384.
- SINGER, I. M., Infinitesimally Homogeneous Spaces, Vol. XIII, No. 4, 1960, pp. 685-697.
- SMITH, K. T., Mean Values and Continuity of Riesz Potentials, Vol. IX, No. 3, 1956, pp. 569-576. SOLITAR, D., see KARRASS, A.
- Spence, R. D., and Wells, C. P., Vector Wave Functions, Vol. IV, No. 1, 1951, pp. 95-104.
- SPENCER, D. C., see SHIFFMAN, MAX
- STAMPACCHIA, GUIDO, On Some Regular Multiple Integral Problems in the Calculus of Variations, Vol. XVI, No. 4, 1963, pp. 383–422.
- —, Some Limit Cases of L^p-Estimates for Solutions of Second Order Elliptic Equations, Vol. XVI, No. 4, 1963, pp. 505-510.
- STOKER, J. J., The Formation of Breakers and Bores, Vol. I, No. 1, 1948, pp. 1-80.
- —, Waves Over Beaches of Small Slope, Under a Dock, Under an Overhanging Cliff, and Past Plane Barriers; Introductory Paper, Vol. I, No. 2, 1948, pp. 101-108.
- —, On the Uniqueness Theorems for the Embedding of Convex Surfaces in Three-Dimensional Space, Vol. III, No. 3, 1950, pp. 231–258.

STOKER, J. J., Unsteady Waves on a Running Stream, Vol. VI, No. 4, 1953, pp. 471-482.

-, On the Stability of Mechanical Systems, Vol. VIII, No. 1, 1955, pp. 133-142.

-, On Radiation Conditions, Vol. IX, No. 3, 1956, pp. 577-596.

-, Developable Surfaces in the Large, Vol. XIV, No. 3, 1961, pp. 629-636.

-, see Peters, A. S.

TATE, JOHN, On the Relation Between Extremal Points of Convex Sets and Homomorphisms of Algebras, Vol. IV, No. 1, 1951, pp. 31-32.

TAUSSKY, OLGA, see NEWMAN, M.

THOMAS, L. H., Computation of One-Dimensional Compressible Flows Including Shocks, Vol. VII, No. 1, 1954, pp. 195-206.

THOMAS, T. Y., The Determination of Pressure on Curved Bodies Behind Shocks, Vol. III, No. 2, 1950, pp. 103-132.

THOMÉE, VIDAR, see KELLER, H. B.

TODD, JOHN, Motivation for Working in Numerical Analysis. Vol. VIII, No. 1, 1955, pp. 97-116.
 —, A Direct Approach to the Problem of Stability in the Numerical Solution of Partial Differential Equations, Vol. IX, No. 3, 1956, pp. 597-612.

TREVES, F. J., see NIRENBERG, LOUIS

TRICOMI, F. G., A New Entire Function Related to a Well-Known Noncontinuable Power Series, Vol. V, No. 3, 1952, pp. 213–222.

TRUESDELL, C. A., The Simplest Rate Theory of Pure Elasticity, Vol. VIII, No. 1, 1955, pp. 123-132. Ungar, Peter, The Cutoff Point for Group Testing, Vol. XIII, No. 1, 1960, pp. 49-54.

-, Instability of Wave Trains, Vol. XIV, No. 3, 1961, pp. 637-644.

-, Stable Hill Equations, Vol. XIV, No. 4, 1961, pp. 707-710.

-, and Wyler, E., An Example in Elementary Topology, Vol. XIII, No. 1, 1960, pp. 55-56.

-, see Leavitt, J.

-, see Rubin, Hanan

URAL'TZEVA, N. N., see LADYZHENSKAIA, O. A.

VAN HEIJENOORT, JOHN, On Locally Convex Manifolds, Vol. V, No. 3, 1952, pp. 223-242.

Van Norton, Roger, On the Real Spectrum of a Mono-Energetic Neutron Transport Operator, Vol. XV, No. 2, 1962, pp. 149-158.

VARADARAJAN, V. S., Probability in Physics and a Theorem on Simultaneous Observability, Vol. XV, No. 2, 1962, pp. 189-218.

VARLEY, ERIC, A Class of Nonlinear Partial Differential Equations, Vol. XV, No. 1, 1962, pp. 91-94.

Von Kármán, T., and Lin, C. C., On the Existence of an Exact Solution of the Equations of Navier-Stokes, Vol. XIV, No. 3, 1961, pp. 645–656.

Von Mises, Richard, Discussion on Transonic Flow, Vol. VII, No. 1, 1954, pp. 145-148.

VON NEUMANN, JOHN, see GOLDSTINE, H. H.

WARGA, JACK, see SHAPIRO, H. N.

WASOW, WOLFGANG, Singular Perturbations of Boundary Value Problems for Nonlinear Differential Equations of the Second Order, Vol. IX, No. 1, 1956, pp. 93-114.

—, Turning Point Problems for Systems of Linear Differential Equations. Part 1: The Formal Theory, Vol. XIV, No. 3, 1961, pp. 657-674.

—, Turning Point Problems for Systems of Linear Differential Equations, Vol. XV, No. 2, 1962, pp. 173-188.
Weinberger, H. F., Upper and Lower Bounds for Eigenvalues by Finite Difference Methods, Vol. IX, No. 3, 1956, pp. 613-624.

—, Remarks on the Preceding Paper of Lax (see Lax, P. D., Differential Equations, Difference Equations and Matrix Theory), Vol. XI, No. 2, 1958, pp. 195-196.

Weinstein, Alexander, The Singular Solutions and the Cauchy Problem for Generalized Tricomi Equations, Vol. VII, No. 1, 1954, pp. 105-116.

Weitz, M., and Keller, J. B., Reflection of Water Waves From Floating Ice in Water of Finite Depth, Vol. III, No. 3, 1950, pp. 305-318.

WEITZ, M., see KELLER, J. B.

Wells, C. P., see Spence, R. D. Wendruff, Burton, see Lax, P. D.

WEYL, HERMANN, Shock Waves in Arbitrary Fluids, Vol. II, Nos. 2-3, 1949, pp. 103-122.

WHITHAM, G. B., The Flow Pattern of a Supersonic Projectile. Appendix: Two-Dimensional Steady and One-Dimensional Unsteady Flows, Vol. V, No. 3, 1952, pp. 301-348.

-, The Propagation of Weak Spherical Shocks in Stars, Vol. VI, No. 3, 1953, pp. 397-414.

—, A Note on the Stand-off Distance of the Shock in High Speed Flow Past a Circular Cylinder, Vol. X, No. 4, 1957, pp. 531–536.

—, Some Comments on Wave Propagation and Shock Wave Structure With Application to Magnetohydrodynamics, Vol. XII, No. 1, 1959, pp. 113-158.

—, Group Velocity and Energy Propagation for Three-Dimensional Waves, Vol. XIV, No. 3, 1961, pp. 675-692.

WIGNER, E. P., The Unreasonable Effectiveness of Mathematics in the Natural Sciences, Vol. XIII, No. 1, 1960, pp. 1-14.

WILCOX, C. H., An Expansion Theorem for Electromagnetic Fields, Vol. IX, No. 2, 1956, pp. 115-134. Wing, G. M., see Lehner, Joseph

Wolf, František, On the Essential Spectrum of Partial Differential Boundary Problems, Vol. XII, No. 2, 1959, pp. 211-228.

Wu, T. T., A Note on the Stability Condition for Certain Wave Propagation Problems, Vol. XIV, No. 4, 1961, pp. 745-748.

WYLER, EVA, see UNGAR, PETER

YANOWITCH, MICHAEL, Nonlinear Buckling of Circular Elastic Plates, Vol. IX, No. 4, 1956, pp. 661-672,

-, Errata: Nonlinear Buckling of Circular Elastic Plates, Vol. X, No. 4, 1957, p. 623.

-, Gravity Waves in a Heterogeneous Incompressible Fluid, Vol. XV, No. 1, 1962, pp. 45-62.

YOUNG, L. C., Some New Methods in Two-Dimensional Variational Problems With Special Reference to Minimal Surfaces, Vol. IX, No. 3, 1956, pp. 625-632.

Communications on PURE AND APPLIED MATHEMATICS

A JOURNAL ISSUED QUARTERLY BY
THE COURANT INSTITUTE OF MATHEMATICAL SCIENCES
NEW YORK UNIVERSITY

VOLUME XVI • 1963

INTERSCIENCE PUBLISHERS

A Division of John Wiley & Sons, Inc., New York-London All rights reserved

Reproduction in whole or in part permitted for any purpose of the United States Government



Communications on

PURE AND APPLIED MATHEMATICS

CONTENTS

Volume XVI, Nos. 1-4, 1963

Number 1, February

Frederick, Karen N., The Hopfian Property for a Class of Fundamental	
Groups	
Rossi, Hugo, On Envelops of Holomorphy	
Schwartz, J., Two Finite, Non-Hyperfinite, Non-Isomorphic Factors	1
SHIELDS, ALLEN, On Quotients of Exponential Polynomials	2
Jones, Jr., B. Frank, Various Methods for Finding Unknown Coefficients	
in Parabolic Differential Equations	33
MORGAN, RICHARD C., and KARP, SAMUEL N., Uniqueness Theorem for a	
Surface Wave Problem in Electromagnetic Diffraction Theory	43
Peters, A. S., A Note on the Integral Equation of the First Kind with a	-
Cauchy Kernel	57
FIGUEIREDO, DJAIRO GUEDES DE, The Coerciveness Problem for Forms Over	0,
Vector Valued Functions	63
SEIDMAN, THOMAS I., Correction	95
balanting from in Correction	
Number 2, May	
MARTENS, HENRIK H., Torelli's Theorem and a Generalization for Hyper-	
Elliptic Surfaces	97
SCHWARTZ, J., Non-Isomorphism of a Pair of Factors of Type III	111
AGMON, S., and NIRENBERG, L., Properties of Solutions of Ordinary Differ-	
ential Equations in Banach Space	121
Lax, Peter D., An Inequality for Functions of Exponential Type	241
EAX, FETER D., An inequality for Functions of Exponential Type	211
Number 3, August	
SCHWARTZ, J., Type II Factors in a Central Decomposition	247
SCHWARTZ, J., Compact Analytical Mappings of B-Spaces and a Theorem of	
Jane Cronin	253

VOLUME CONTENTS, 1963

Blumenson, L. E., On the Eigenvalues of Hill's Equation	
HANISCH, HERMAN, and HIRSCH, WARREN M., On a Functional Equation	
Arising in the Theory of Queues	
Kaplan, Stanley, On the Growth of Solutions of Quasi-Linear Parabolic	
Equations	
Nirenberg, L., and Treves, F., Solvability of a First Order Linear Partia	
Differential Equation	
MORAWETZ, CATHLEEN S., A Uniqueness Theorem for the Relativistic	
Wave Equation	
11410 24441014	
Number 4, November	
AVILA, GERALDO S. S., and KELLER, JOSEPH B., The High-Frequency	
Asymptotic Field of a Point Source in an Inhomogeneous Medium	
STAMPACCHIA, GUIDO, On Some Regular Multiple Integral Problems in	
the Calculus of Variations	
KANIEL, SHMUEL, and SCHECHTER, MARTIN, Spectral Theory for Fredholm	
Operators	
CONLEY, CHARLES, On Some New Long Periodic Solutions of the Plane	
Restricted Three Body Problem	
LEVY, DOROTHY M., and KELLER, JOSEPH B., Instability Intervals of	
Hill's Equation	
LAX, P. D., MORAWETZ, C. S., and PHILLIPS, R. S., Exponential Decay of Solutions of the Wave Equation in the Exterior of a Star-Shaped	
Obstacle	4 00 00
Hanisch, Herman, and Hirsch, Warren, Properties of a Transient Queue	
Stampacchia, Guido, Some Limit Cases of L^p -Estimates for Solutions of	
Second Order Elliptic Equations	
Author Index	511
Cumulative Author Index	513





